

	L #	Hits	Search Text	DBs	Time Stamp
1	L1	88318	graft	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 07:50
2	L2	1845	side adj chain near10 (acrylate or methacrylate)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 07:51
3	L3	1844	macromer	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 07:51
4	L4	31881 9	ink	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 07:52
5	L5	64	tsutsumi.in. and graft	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 07:54
6	FAMILY	1	2001-618266.NRAN.	DERWENT	2002/05/06 07:53
7	L7	26	1 and 2 and 3 and 4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 08:00
8	L8	126	1 and 3 and 4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 08:00
9	L9	6	1 and 2 and 3 and macromonomer	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 08:00
10	L10	250	1 and macromonomer and 4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 08:00

	L #	Hits	Search Text	DBs	Time Stamp
11	L11	224	10 not 8	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 08:03
12	L12	169	11 and initiator	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 08:06
13	L13	22	((("5026755") or ("5714538") or ("5719204") or ("6020400") or ("6005023") or ("5708095") or ("6117921") or ("5589522") or ("6031019") or ("6232369") or ("5708095") or ("6174357"))).PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 08:08
14	L14	14	ep-879858-\$.did. or ep-781819-\$.did. or jp-10060360-\$.did. or jp-06100810-\$.did. or ep-851013-\$.did. or ep-783023-\$.did. or ep-722994-\$.did.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 08:09
15	L15	37	1 and diazotiz\$5 and 4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 09:28
16	L16	53	1 and 2 and 4 and initiator	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 09:26
17	L17	0	1 near10 diazotiz\$5 and 2	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 09:27
18	L18	1	1 same diazotiz\$5 and 2	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 09:27
19	L19	1	1 and diazotiz\$5 and 2	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 09:28

	L #	Hits	Search Text	DBs	Time Stamp
20	L20	7	1 and diazotiz\$5 and graft\$3 near10 (acrylate or methacrylate)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 09:28
21	L21	226	1 and diazotiz\$5	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 09:35
22	L22	12	polymer near10 diazotiz\$5 near10 monomer	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 09:34
23	L23	1	1 and (methacrylic or acrylic) adj3 chloride near10 peroxide	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 09:35
24	L24	63	graft and diazotiz\$5	USOCR	2002/05/06 09:38
25	L25	0	graft near10 living adj polymerization	USOCR	2002/05/06 09:39
26	L26	21	graft near10 living adj polymerization	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 09:39
27	L27	3703	polymer near10 initiator and graft	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 09:55
28	L28	160	polymer near10 azo near5 initiator and graft	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 09:42
29	L29	44	28 and 4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 09:43
30	L30	434	27 and 4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 09:44

	L #	Hits	Search Text	DBs	Time Stamp
31	L31	353	polymer near10 (incorporat\$3 or terminal or introduc\$3) near10 initiator and graft	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 09:58
32	L32	0	1 and (methacrylic or acrylic) adj2 chloride near10 react\$3 near10 peroxide	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 11:11
33	L33	82	polymer near10 (incorporat\$3 or terminal or introduc\$3) near10 initiator same graft	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 10:08
34	L34	350	1 and (3 or macromonomer) and 4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 10:08
35	L36	156	1 and (acrylate or methacrylate) near10 (3 or macromonomer) and 4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 10:09
36	L37	14	((("5231131") or ("5147952") or ("3786116") or ("3842059"))).PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 10:58
37	L41	7889	monomer near10 (uv or ultraviolet or benzotriazole or benzophenone)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 11:01
38	L42	298	polymerizable near10 (benzotriazole or benzophenone)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 11:00
39	L43	1492	(41 or 42) and 4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 11:01
40	L44	222	(41 or 42) and 4.ti.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 11:01

	L #	Hits	Search Text	DBs	Time Stamp
41	L45	920	monomer near10 (benzotriazole or benzophenone)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 11:01
42	L46	178	(45 or 42) and 4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 11:01
43	L47	3	nguyen.in. and shosho.xa.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 11:10
44	L48	1	react\$3 near10 monomer near10 (initiator or peroxide) and 1	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 11:13
45	L49	1	1 and (methacrylic or acrylic) adj2 chloride near10 peroxide	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 11:12
46	L50	2	(methacrylic or acrylic) adj2 chloride near10 peroxide	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 11:12
47	L51	199	monomer near10 function near10 initiator	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 11:19
48	L52	0	treat\$4 near10 monomer near10 (initiator or peroxide) and 1	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 11:14
49	L53	57	51 and 1	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 11:14
50	L54	93	1 and polymer near10 function near10 initiator	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 11:21

	L #	Hits	Search Text	DBs	Time Stamp
51	L55	6	(polymer or polymeric) adj initiator adj method	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 11:25
52	L56	233	(polymer or polymeric) adj initiator and 1	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 11:26
53	L57	41	56 and 4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 11:34
54	L58	754	(treat\$4 or react\$3) near10 halide near10 (initiator or peroxide)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 11:35
55	L59	100	58 and 1	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 11:40
56	L60	0	acid adj chloride near10 alcohol adj peroxide near10 initiator	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 11:42
57	L61	0	(halide or chloride) near10 alcohol adj peroxide near10 initiator	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 11:42
58	L62	763	method near5 1 near5 polymerization	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 11:43
59	L63	2	62 same azo adj initiator	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 11:44
60	L64	82	62 same (halide or chloride or polymer or monomer) near10 (initiator or peroxide)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/06 11:45

	L #	Hits	Search Text	DBs	Time Stamp
1	L1	88387	graft	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/07 08:05
2	L2	15262	polymer near10 (reactive or functional) adj group	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/07 08:08
3	L3	9454	monomer near10 (reactive or functional) adj group	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/07 08:06
4	L4	880	1 and 2 and 3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/07 08:06
5	L5	153	1 same 2 same 3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/07 08:06
6	L6	23	5 and ink	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/07 08:07
7	L7	954	backbone same polymer near10 (reactive or functional) adj group	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/07 08:09
8	L8	873	(sidechain or side adj chain) same polymer near10 (reactive or functional) adj group	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/07 08:09
9	L9	42	1 and 7 and 8	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/07 08:12
10	L10	6	9 and ink	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/07 08:16

	L #	Hits	Search Text	DBs	Time Stamp
11	L11	129	1 and ink and (acrylic or acrylate or methacrylic or methacrylate) near10 (side adj chain or sidechain)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/07 08:26
12	L12	62	polymeric near5 initiator and ink and 1	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/07 08:29
13	L13	186	backbone and side adj chain and ink and 1	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/07 08:36
14	L14	264	(polymer near5 initiator) and ink and 1	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/07 08:47
15	L15	137	initiator adj precursor	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/07 08:47
16	L16	53	1 and 15	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/05/07 08:47



DERWENT-ACC-NO: 1994-156819  
DERWENT-WEEK: 199419  
COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Aq. pigment ink, for ink jet recording & recorder - contains water soluble resin of hydrophilic and hydrophobic polymers, hydrophilic organic solvent and water, having high storage stability, etc.

PATENT-ASSIGNEE: CANON KK [CANO]

PRIORITY-DATA: 1992JP-0251586 (September 21, 1992)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES
MAIN-IPC			
JP 06100810 A	April 12, 1994	N/A	014
011/00			C09D

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
JP06100810A	N/A	1992JP-0251586	September 21, 1992

INT-CL (IPC): B41J002/01; B41M005/00 ; C09D011/02  
ABSTRACTED-PUB-NO: JP06100810A

BASIC-ABSTRACT:

The ink contains pigment, water soluble resin, hydrophilic organic solvent and water. The water soluble resin is a graft copolymer consisting of (a) hydrophilic polymer chain segment which contains more than 80 mol.% of monomer selected from among (meth)acrylic acid, maleic acid and (meth)acrylic acid hydroxyalkyl ester and (b) hydrophobic polymer chain segment which contains more than 80 mol.% of monomer selected from among styrene and (meth)acrylic acid alkyl ester in an (a)/(b) ratio of 20:80-80:20 by weight. The copolymer has a number average molecular weight of 1,000-10,000 and a weight average molecular weight of 1,5000-20,000. It is contained in 0.1-5 wt.%. The pigment is contained in 1 to 20, pref. 2-12 wt.%. The organic solvent and water are contained in 3-50 and 10-90 wt.% respectively.

USE/ADVANTAGE - The ink is used for ink jet recording in which heat energy is applied to the ink according to recording signal and the ink is sprayed in droplets through small orifices. The aq. pigment ink has high storage stability and can be sprayed for long hours under stabilised condition in ink jet recording to produce prints with high fastness and excellent scuff resistance.

CHOSEN-DRAWING: Dwg.1/5

DERWENT-CLASS: A

CLIPPEDIMAGE= JP410060360A

PAT-NO: JP410060360A

DOCUMENT-IDENTIFIER: JP 10060360 A

TITLE: PIGMENT DISPERSION AND COATING AGENT COMPOSITION CONTAINING THE SAME

PUBN-DATE: March 3, 1998

INVENTOR-INFORMATION:

NAME

IWASE, KOJI

SHINTANI, TAKEHIKO

UCHIYAMA, NORIYUKI

ISHIKAWA, HIROYUKI

ASSIGNEE-INFORMATION:

NAME

COUNTRY

SAKATA CORP

N/A

APPL-NO: JP08218726

APPL-DATE: August 20, 1996

INT-CL (IPC): C09D017/00; C09D007/12 ; C09D011/00 ; G02B005/20 ; G03F007/004 ; G03F007/033

ABSTRACT:

PROBLEM TO BE SOLVED: To obtain a pigment dispersion showing improved microdispersion stability even when the concentration of the pigment in a nonaqueous solvent is high by using a novel substantially colorless pigment dispersant being not a colorant derivative.

SOLUTION: This invention provides a pigment dispersion containing a pigment, a solvent, a pigment dispersant and optionally a binder resin, wherein the pigment dispersant is a graft copolymer comprising at least 10mol% structural units represented by formulas I and/or II (X<SP>1</SP> and X<SP>2</SP> are each a 2-4C divalent hydrocarbon group; i and j are each 1-100; Y is a 2-20C divalent hydrocarbon group; R<SP>1</SP> and R<SP>4</SP> are each H or methyl; Z<SP>1</SP> and Z<SP>2</SP> are each a 1-20C monovalent active-hydrogen free monovalent organic group bonded to X<SP>1</SP>, X<SP>2</SP> or the  $\alpha$ -carbon of the carbonyl through any of O, N and S; and so forth) and at least 10mol% structural units represented by formulas III and/or IV (R<SP>6</SP> and R<SP>10</SP> are each H or methyl; and so forth) and having a weight-average molecular weight of 3,000-100,000 and is used in an amount of 0.2 pt.wt. per 100 pts.wt. pigment.

COPYRIGHT: (C)1998, JPO

特開平10-60360

(43)公開日 平成10年(1998)3月3日

(51)Int.Cl. <sup>6</sup>	識別記号	庁内整理番号	F I	技術表示箇所
C 0 9 D 17/00	P U J		C 0 9 D 17/00	P U J
7/12	P S M		7/12	P S M
11/00	P T S		11/00	P T S
G 0 2 B 5/20	1 0 1		G 0 2 B 5/20	1 0 1
G 0 3 F 7/004	5 0 5		G 0 3 F 7/004	5 0 5

審査請求 未請求 請求項の数3 OL (全 13 頁) 最終頁に続く

(21)出願番号	特願平8-218726	(71)出願人	000105947 サカタインクス株式会社 大阪府大阪市西区江戸堀1丁目23番37号
(22)出願日	平成8年(1996)8月20日	(72)発明者	岩瀬 孝司 大阪市西区江戸堀一丁目23番37号 サカタ インクス株式会社内
		(72)発明者	新谷 岳彦 大阪市西区江戸堀一丁目23番37号 サカタ インクス株式会社内
		(72)発明者	内山 範之 大阪市西区江戸堀一丁目23番37号 サカタ インクス株式会社内
		(74)代理人	弁理士 朝日奈 宗太 (外1名)

最終頁に続く

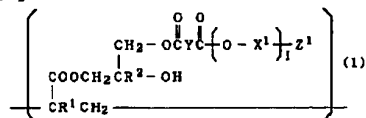
(54)【発明の名称】 顔料分散物及びそれを用いた被覆剤組成物

(57) 【要約】

【課題】 非水溶媒中で顔料濃度が高くても微分散安定化の向上された顔料分散物を提供する。

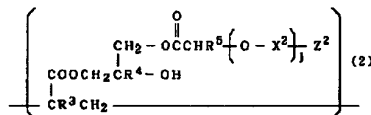
【解決手段】 顔料、溶媒、顔料分散剤、及び必要に応じてバインダー樹脂を含む顔料分散物において、顔料分散剤として、重量平均分子量 3,000~100,000 のグラフト共重合体であって、当該グラフト共重合体中、一般式（１）及び／又は一般式（２）で表される構成単位を少なくとも 10 モル％相当する量、及び一般式（３）及び／又は一般式（４）で表わされる構成単位を少なくとも 10 モル％相当する量含有するグラフト共重合体を、顔料 100 重量部に対して少なくとも 0.2 重量部含有することを特徴とする顔料分散物。

【化19】



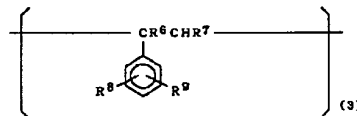
(式中、X<sup>i</sup>は炭素数が2～4の範囲にある2価の炭化水素基を、iは1～100の範囲の整数を示す)

【化20】



(式中、 $X^2$ は炭素数が2～4の範囲にある2価の炭化水素基を、 $j$ は0～100の範囲の整数を示す)

【化21】



【化22】

